

Duplicate

NOTICE OF REAL PROPERTY ASSESSMENT FOR 1954 FIRST TAXATION DIVISION

Taxpayer's
Copy

Pursuant to Law the Tax Commissioner hereby gives Notice (a) of his findings of the Fair and Reasonable Value as of January 1st, 1954, of the Property described in this Notice, (b) of the exemption (if any) allowed or disallowed, and (c) of the Net Taxable value of said Property as hereinafter set forth.

TAX COMMISSIONER
BY TAX ASSESSOR
FIRST TAXATION DIVISION

This is a notice only - NOT a bill.

Dated March 15, 1954

ITEMS	ASSESSOR'S VALUES
Land	\$ 30000 00
Improvements	\$ 10000 00
Total	\$ 40000 00
Less Exemption	\$ — 00
Net Taxable	\$ 40000 00

TERRITORY OF HAWAII

FIRST DIVISION

AREA AND DESCRIPTION	KEY
490.518 Lts. A to F LCapp. 223 Palmyra Isl.	3-9-01-1
Ellen Fullard-Leo, et al (T/C)-1- Und	
Ellen Fullard-Leo 2389 Prince Edward St. Honolulu 15 Hawaii	

FIRST DIVISION

1954

TERRITORY OF HAWAII REAL PROPERTY TAX BILL

DEMAND IS HEREBY MADE FOR ALL TAXES NOW DUE.
PRESENT THIS BILL WITH YOUR PAYMENT.
It becomes your RECEIPT when stamped by the Cash Register.

THIS BILL IS FOR THE FULL VALUE OF THE PARCEL

Monthly and
Interest

1st Installment
Due June 15

2nd Installment
Due Nov. 21

Total
Amount Due

325 00

325 00*

ALL TAXES REMAINING UNPAID WHEN DUE BECOME
DELINQUENT

DELINQUENT TAXES (a) a penalty of 10% and interest at the rate
of 4% of 1% per month.

WHEN PAYMENTS ARE MADE BY CHECK local credit will not be
given until your check has been cleared by the bank upon which it is drawn.
YOUR RECEIPT IS VOID IF CHECK IS NOT HONORED.

Make Check Payable To: Territorial Tax Collector

P. O. BOX 259, HONOLULU 9, HAWAII

AREA & DESCRIPTION

KEY

490.518 Lts. A to F
LCapp. 223 Palmyra Isl.

3-9-01-1

Ellen Fullard-Leo, et al (T/C)-1-
Und

Ellen Fullard-Leo
2389 Prince Edward St.
Honolulu 15 Hawaii

EXHIBIT

"19"

FLF 000092

Duplicate

NOTICE OF REAL PROPERTY ASSESSMENT FOR 1955 FIRST TAXATION DIVISION

Taxpayer's
Copy

Pursuant to Law the Tax Commissioner hereby gives Notice (a) of his findings of the fair and reasonable value as of January 1st, 1955, of the Property described in this Notice, (b) of the exemption (if any) allowed or disallowed, and (c) of the Net Taxable value of said Property as hereinafter set forth.

TAX COMMISSIONER
BY TAX ASSESSOR
First Taxation Division

This is a notice only - NOT a bill.

Dated March 15, 1955

ITEMS	ASSESSOR'S VALUES	
Land	\$ 30000	00
Improvements	\$ 10000	00
Total	\$ 40000	00
Less Exemption	\$ -	00
Net Taxable	\$ 40000	00

TERRITORY OF HAWAII

FIRST DIVISION

AREA AND DESCRIPTION	KEY
490.51# Lts. A to F LCApp. 223 Palmyra Isl.	3-9-01-1
Owner Ellen Fullard-Leo, et al (Palmyra Development Co. Ltd. Le)	-1-Und
Address Ellen Fullard-Leo 2389 Prince Edward St. Honolulu 15 Hawaii	

NOTICE OF REAL PROPERTY HEARING before the BOARD OF REVIEW FIRST TAXATION DIVISION

To the Taxpayer:

You are hereby notified that the Board of Review will meet to hear your appeal on the assessed valuation of the property described hereon;

Place Territorial Tax Office
Queen and Punchbowl Streets

Date of Hearing May 31 1955

Time of Hearing 1:45 P. M.

Dated

A. H. LANDGRAF, JR.
Assessor, First Taxation Division
Honolulu, Hawaii

TERRITORY OF HAWAII

FIRST DIVISION

AREA AND DESCRIPTION	KEY
490.51# Lts. A to F LCApp. 223 Palmyra Isl.	3-9-01-1
Owner Ellen Fullard-Leo, et al (Palmyra Development Co. Ltd. Le)	-1-Und
Address Ellen Fullard-Leo 2389 Prince Edward St. Honolulu 15 Hawaii	

FLF 000093

NOTICE OF REAL PROPERTY ASSESSMENT FOR 1956

FIRST TAXATION DIVISION

Taxpayer's
Copy

Pursuant to Law the Tax Commissioner hereby gives Notice (a) of his findings of the Fair and Reasonable Value as of January 1st, 1956, of the Property described in this Notice, (b) of the exemption (if any) allowed or disallowed, and (c) of the Net Taxable value of said Property as hereinafter set forth.

This is a notice only - NOT a bill.

Dated March 15, 1956.

TAX COMMISSIONER
BY TAX ASSESSOR
First Taxation Division

Palmyra

Page

TAX KEY				ASSESSOR'S VALUE				
3	5	PLAT	PARCEL	LAND	BUILDING & OTHER IMPROVEMENTS	TOTAL	LESS EXEMPTION	NET TAXABLE
3	9	01	01	30000	10000	40000		40000
OWNER ADDRESS				LAND DESCRIPTION		AREA		
				LISA TO F LCAPP 223		00490051 A		
				PALMYRA ISL				
				ELLEN FULLARD LEO ETAL		PALMYRA		DEVELOP
				CO LTD LE UND				
				FULLARD LEO ELLEN				
				2389 PRINCE ED ST				
				HONOLULU 15 HAW				

over

1956
FIRST DIVISION

TERRITORY OF HAWAII

DEPARTMENT OF THE TAX COMMISSIONER

REAL PROPERTY TAX BILL

ORIGINAL

Palmyra

Demand is hereby made for taxes now due.

Make check payable to Territorial Tax Collector, P. O. Box 250, Honolulu 9, Hawaii.

No receipt will be mailed to you since your cancelled check or money order stub will constitute a receipt.

However, if you prefer a receipt, please so indicate and one will be sent. Receipt Requested ☐

When payments are made by check final credit will not be given until your check has been cleared by the bank upon which it is drawn.

All taxes remaining unpaid when due become delinquent. Delinquent taxes bear a penalty of 10% and interest at the rate of 1/2 of 1% per month or fraction of a month until paid.

TAX KEY				TOTAL AMOUNT DUE	1ST INSTALLMENT DUE JUNE 20	2ND INSTALLMENT DUE NOV 20	PENALTY & INTEREST	NET TAXABLE VALUE
3	9	01	001	42960	21480	21480		40000
OWNER ADDRESS				LAND DESCRIPTION		AREA		
				LISA TO F LCAPP 223		00490051 A		
				PALMYRA ISL				
				ELLEN FULLARD LEO ETAL		PALMYRA		DEVELOP
				CO LTD LE UND				
				FULLARD LEO ELLEN				
				2389 PRINCE ED ST				
				HONOLULU 15 HAW				

FLF 000087

ASSESSMENT RECORD—FIELD REPORT—DISTRICT OF HONOLULU, FIRST TAXATION DIVISION

1931	1932	1933	1934	1935
<p>1931 <i>Seattle Hotel Co.</i></p>				
<p>1932 <i>Land Palace, Island's & Kings' Co.</i></p>				
<p>1933 <i>2,500</i></p>				
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<p>2100</p>				

Form A. D. 20

TERRITORY OF HAWAII TAX COMMISSIONER

Dated March 15, 1938

ITEMS	ASSESSOR'S VALUES
Land	20000
Improvements	
Total	20000
Less Exemption	—
Net Taxable	20000

24.244 24.244

Pursuant to Law the Tax Commissioner hereby gives Notice (a) of his findings of the Fair and Reasonable Value as of January 1st, 1938, of the Property described in this Notice (b) of the exemption (if any) allowed or disallowed, and (c) of the Net Taxable value of said Property as hereinafter set forth.

Original

NOTICE OF REAL PROPERTY ASSESSMENT FOR 1938

1083 Tax Commissioner's
Copy

TAX COMMISSIONER

SAMUEL M. FULLER
TAX ASSESSOR

AREA & DESCRIPTION	KEY	FIRST DIVISION
Palmyra Island, Kingmans Reef	3-9-01-01	
Ellen & Leslie Fullard-Leo		
Leslie Fullard-Leo		
2389 Prince Edward Ave. Honolulu, T. H.		

Address Owner

Form A. D. 20

Net 1 DEDUCT

117 117

P. O. Box 653
Honolulu, T. H.

TG 00086

PROPERTY ASSESSMENT 1084 Tax Commissioner's
Copy

EXHIBIT

FIRST DIVISION

3088

1939

TERRITORY OF HAWAII REAL PROPERTY TAX BILL

DEMAND IS HEREBY MADE FOR ALL TAXES NOW DUE. PRESENT THIS BILL WITH YOUR PAYMENT.
It becomes your RECEIPT when stamped by the Cash Register
MAKE CHECK PAYABLE TO TAX COLLECTOR

THIS BILL IS FOR THE FULL VALUE OF THE PARCEL.				TERRITORY OF HAWAII FIRST DIVISION	
Item	1st Installment Delinquent June 20	2nd Installment Delinquent Nov. 20	TOTAL REAL PROPERTY TAX	AREA & DESCRIPTION	KEY
				Palmyra Island -Kingmans Reef	3-9-01-01
				Ellen & Leslie Fullard-Leo	
		30.88		Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, T. H.	

T. H. Form No. B-4-37 Approved by the Governor of Hawaii, September 1st, 1938

Read Carefully the Instructions on the Back of this Bill

FLF 000091

Form A. D. 20

TERRITORY OF HAWAII
TAX COMMISSIONER

Territory of Hawaii,

SS.

REAL PROPERTY RETURN FOR 1939

1075

TG 00087

Original
Tax Commission
Copy

..... do solemnly swear that of own knowledge the within is a true return of and concerning
the real property hereinafter described.

Sworn to before me this

..... day of 1939

Assessor

By

Dated March 15, 1939

ITEMS	ASSESSOR'S VALUES	
Land	\$ 2000	00
Improvements	\$ —	00
Total	\$ 2000	00
Less Exemption	\$ —	00
Net Taxable	\$ 2000	00
	3088	3088

TERRITORY OF HAWAII

FIRST DIVISION

AREA AND DESCRIPTION

KEY

Palmyra Island,
Kingmans Reef

3-9-01-01

Owner

Ellen & Leslie Fullard-Lee

Address

Leslie Fullard-Lee
2389 Prince Edward Ave.
Honolulu, T. H.

Territory of Hawaii,

SS.

REAL PROPERTY RETURN FOR 1939

1076

Tax Comp

Form A. D. 20

TERRITORY OF HAWAII
TAX COMMISSIONER

Dated March 15, 1940	
ITEMS	ASSESSOR'S VALUES
Land	\$ 2000 00
Improvements	\$ — 00
Total	\$ 2000 00
Less Exemption	\$ — 00
Net Taxable	\$ 2000 00
	3040 3040

Assessor

do solemnly swear that of my own knowledge the within is a true return of and concerning the real property hereinafter described.

Sworn to before me this _____ day of _____ 1940

Territory of Hawaii;

ss.

REAL PROPERTY RETURN FOR 1940

1413

Tax Commissioner
Copy

Original

By

Taxpayer

TERRITORY OF HAWAII		FIRST DIVISION
AREA AND DESCRIPTION	KEY	
Palmyra Island,	3-9-01-01	
Kingmans Reef		
Ellen & Leslie Fullard-Leo		
Owner		
Address	Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, T. H.	

TG 00088

Form A. D. 20-S-H 29187

TERRITORY OF HAWAII TAX COMMISSIONER

Dated March 15, 1941	
ITEMS	ASSESSORS VALUES
Land	\$ 2000 00
Improvements	\$ 00 00
Total	\$ 2000 00
Less Exemption	\$ 00 00
Net Taxable	\$ 2000 00

do solemnly swear that of
the real property hereinafter described.
Sworn to before me this
day of 1941

Assessor

Territory of Hawaii

ss.

REAL PROPERTY RETURN FOR 1941

1569

Original
Tax Commissioner's
Copy

By

TERRITORY OF HAWAII		FIRST DIVISION
AREA AND DESCRIPTION		KEY
Palmyra Island, Kingmans Reef		3-9-01-01
Owner	Ellen & Leslie Fullard-Leo	
Address	Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, T. H.	

Taxpayer.

TG 00089

Territory of Hawaii

REAL PROPERTY RETURN FOR 1941

Original

Form 10-9-Rev. 1939

TERRITORY OF HAWAII
TAX COMMISSIONER

AMENDED NOTICE OF REAL PROPERTY ASSESSMENT FOR 1942

(Appellant)

Appeal Dated 4-8-42
Settlement by Board of Review
Decision of

19

of

Ellen & Leslie Fullard-Lee

Case No.

7177

Dated 2-26-43

19

Cancels All Previous Notices

Dated 3-4-43

AB 19

Assessor

Acct. No.	As Amended	Final Assessment
Land	17700.00 ✓	17700.00 ✓
Improvement	---	---
Total	17700.00 ✓	17700.00 ✓
Exemption	---	---
Net Taxable	17700.00 ✓	17700.00 ✓
Taxes	159.32 ✓	159.32 ✓

Taxes (Additional) \$	X	(Deduction) \$	1/X
Other Reasons for Adjustment			
Amount Taxes in Territory	To Territory	DISTRIBUTION	To Territory

TERRITORY OF HAWAII		DIVISION
AREA & DESCRIPTION		KEY
Palmyra Island		3-9-01-01
Kingmans Reef		
Owner Ellen & Leslie Fullard-Lee		
Address Leslie Fullard-Lee 2389 Prince Edward Ave. Honolulu, T.H.		

TG 00090

Form A.D. 20 APCO-363714

TERRITORY OF HAWAII
TAX COMMISSIONER

Territory of Hawaii

REAL PROPERTY RETURN FOR 1943
FIRST TAXATION DIVISION

1644

 Original
 Tax Commissioner's
 Copy

 I do solemnly swear that of
 the real property hereinafter described
 sworn to before me this

1943.

A 6644007

By

Taxpayer

Dated March 15, 1943

ITEMS	ASSESSOR'S VALUES
Land	\$ 14,700 00
Improvements	\$ 00 00
Total	\$ 14,700 00
Less Exemption	\$ 00 00
Net Taxable	\$ 14,700 00
248 51	248 51

TERRITORY OF HAWAII
FIRST DIVISION

AREA AND DESCRIPTION	KEY
Palmyra Island.	3-9-01-01
Kingmans Reef	
Ellen & Leslie Fullard-Leo	
Leslie Fullard-Leo	
2389 Prince Edward Ave.	
Honolulu, T. H.	

Territory of Hawaii

16.

REAL PROPERTY RETURN FOR 1943
FIRST TAXATION DIVISION

1645

 Original
 Tax Commissioner's
 Copy

TG 00093

Form A.D. 20-1 Printshop-63214

TERRITORY OF HAWAII TAX COMMISSIONER

Dated March 15, 1944

ITEMS	ASSESSOR'S VALUES
Land	\$ 17700 00
Improvements	\$ — 00
Total	\$ 17700 00
Less Exemption	\$ — 00
Net Taxable	\$ 17700 00
23143	33493

TERRITORY OF HAWAII		FIRST DIVISION
AREA AND DESCRIPTION	KEY	
2305 Pal...	3-9-01-01	
Islets 5 to 22		
231113...		
23389 Pili...		
Honolulu, IL Hawaii		

Territory of Hawaii

} ss

REAL PROPERTY RETURN FOR 1944
FIRST TAXATION DIVISION
1790
Original
Tax Commissioner's
Copy

do solemnly swear that of ... own knowledge the within is a true return of and concerning
the real property hereinafter described.
Sworn to before me this ... day of ... 1944.

Assessor

By

Taxpayer

TG 00094

Form 110, 20 Advertiser 313404

TERRITORY OF HAWAII
TAX COMMISSIONER

Dated March 15, 1945

ITEMS	ASSESSOR'S VALUES	
Land	\$ 17,700	00
Improvements	\$ -	00
Total	\$ 17,700	00
Less Exemption	\$ -	00
Net Taxable	\$ 17,700	00
	341 25	341 26

Territory of Hawaii

REAL PROPERTY RETURN FOR 1945
FIRST TAXATION DIVISION

3348

Original
Tax Commission
Copy

do solemnly swear that of own knowledge the within is a true return of and concerning the real property here-
invalier described.
Sworn to before me this day of 1945.

Assessor

By

Taspeyer

TERRITORY OF HAWAII

FIRST DIVISION

AREA AND DESCRIPTION	NIX
2365 Palmyra Island, Islets 3 to 52	3-9-01-01
OWNER Ellen & Leslie Fullard-Leo	
ADDRESS Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, 11 Hawaii	

Territory of Hawaii

REAL PROPERTY RETURN FOR 1945

TG 00095

FIRST DIVISION

TERRITORY OF HAWAII REAL PROPERTY TAX BILL

DEMAND IS HEREBY MADE FOR ALL TAXES NOW DUE. PRESENT THIS BILL WITH YOUR PAYMENT:
 It becomes your RECEIPT when stamped by the Cash Register
 MAKE CHECK PAYABLE TO TAX COLLECTOR

3088

1939

THIS BILL IS FOR THE FULL VALUE OF THE PARCEL				TERRITORY OF HAWAII FIRST DIVISION	
Item	1st Installment Delinquent June 20	2nd Installment Delinquent Nov. 20	TOTAL REAL PROPERTY TAX	AREA & DESCRIPTION	KEY
				Palmyra Island	3-9-01-01
				Kingmans Reef	
				Ellen & Leslie Fullard-Leo	
		30.88		Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, T. H.	

T. H. Form No. 2-4-37 Approved by the Governor of Hawaii, September 1st, 1938

Read Carefully the Instructions on the Back of this Bill

FLF 000091

Form D. 20-8-2 61286

TERRITORY OF HAWAII
TAX COMMISSIONER

Territory of Hawaii

REAL PROPERTY RETURN FOR 1946
FIRST TAXATION DIVISION

3691

TG 00096

Original
Tax Commissioner
Copy

do so solemnly swear that of own knowledge the within is a true return of and concerning the real property
hereinafter described.
Sworn to before me this day of 1946.

Auditor

By

Taxpayer

Dated March 15, 1946

ITEMS	ASSESSOR'S VALUES
Land	\$ 17700 00
Improvements	\$ — 00
Total	\$ 17700 00
Less Exemption	\$ — 00
Net Taxable	\$ 17700 00
211 1/2	211 1/2

TERRITORY OF HAWAII

FIRST DIVISION

AREA AND DESCRIPTION	KEY
2389 Palmyra Island, Islets 3 to 52	3-9-01-01
Owner Ellen & Leslie Fullard-Leo	
Address Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, 11 Hawaii	

Territory of Hawaii

REAL PROPERTY RETURN FOR 1946

FIRST TAXATION DIVISION

3692

Original
Tax Commissioner

Form A. D. 20

TERRITORY OF HAWAII TAX COMMISSIONER

Dated March 15, 1947			
ITEMS	ASSESSOR'S VALUES		
Land	\$ 17,700	00	
Improvements	\$ —	00	
Total	\$ 17,700	00	
Less Exemption	\$ —	00	
Net Taxable	\$ 17,700	00	
	287.10	287.80	

Territory of Hawaii

}

REAL PROPERTY RETURN FOR 1947 FIRST TAXATION DIVISION

Original

Tax Commissioner's
Copy

do solemnly swear that of
hereinafter described.
Sworn to before me this day of , 1947.

Ammar

By

Taxpayer

TERRITORY OF HAWAII		FIRST DIVISION
AREA AND DESCRIPTION		KEY
2306 Palmyra Island.		3-9-01-01
Islets 3 to 52		
Owner	Ellen & Leslie Fullard-Leo	
Address	Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, HI Hawaii	

TG 00097

Form 30

TERRITORY OF HAWAII
TAX COMMISSIONER

Dated March 15, 1948		
ITEMS	ASSESSOR'S VALUES	
Land	\$ 17,700	00
Improvements	\$	00
Total	\$ 17,700	00
Less Exemption	\$	00
Net Taxable	\$ 17,700	00

do solemnly swear that of my own knowledge the within is a true return of and concerning the real property hereinafter described. -
 Subscribed and sworn to before me this day of 1948.
 Taxpayer

Assessor

By

Territory of Hawaii

ss.

REAL PROPERTY RETURN FOR 1948
FIRST TAXATION DIVISION

2548

Tax Commissioner's
Copy

Original

TG 00098

TERRITORY OF HAWAII		FIRST DIVISION
AREA AND DESCRIPTION		KEY
2368 Palmyra Island, Islets 3 to 52		3-9-01-01
Owner	Ellen & Leslie Fullard-Leo	
Address	Leslie Fullard-Leo 2368 Palmyra Edward Ave. Honolulu, 11 Hawaii	

Territory of Hawaii

DEAL PROPERTY RETURN FOR 1948

Original

Form A-7, 20

TERRITORY OF HAWAII TAX COMMISSIONER

Territory of Hawaii

} ss.

REAL PROPERTY RETURN FOR 1949 FIRST TAXATION DIVISION

2835

Tax Commissioner's
Copy

Original

TG 00099

do solemnly swear that of own knowledge the within is a true return of and concerning the real property
hereinafter described.
Sworn to before me this day of 1949.

Notary

By

Dated March 15, 1949.

ITEMS	ASSESSOR'S VALUES
Land	\$ 24834 00
Improvements	\$ 200000 00
Total	\$ 224834 00
Less Exemption	\$ 200000 00
Net Taxable	\$ 24834 00
444 02	444 02

TERRITORY OF HAWAII		FIRST DIVISION
AREA AND DESCRIPTION	KEY	
469# Palmyra Island.	3-9-01-01	
Islets 3 to 52		
Owner Ellen & Leslie Fullard-Leo		
Address Leslie Fullard-Leo 2389 Prince Edward Ave. Honolulu, 11 Hawaii		

Form No. 30

TERRITORY OF HAWAII
TAX COMMISSIONER

Dated March 15, 1950	
ITEMS	ASSESSOR'S VALUES
Land	\$ 30000 00
Improvements	\$ 200000 00
Total	\$ 230000 00
Less Exemption	\$ 200000 00
Net Taxable	\$ 30000 00
495110	495110

TERRITORY OF HAWAII		FIRST DIVISION
AREA AND DESCRIPTION	NEW	
430.518 lts. A to F LOAUP, 223 Palmyra Isl.	3-9-01-1	
Owner Ellen Fullard-Leo, et al (T/C)-1- und		
Address Ellen Fullard-Leo 2389 Prince Edward St. Honolulu 15 Hawaii		

Territory of Hawaii

} ss.

REAL PROPERTY RETURN FOR 1950
FIRST TAXATION DIVISION

3564

Original
Tax Commissioner's
Copy

do solemnly swear that of
hereafter described.
Sworn to before me this day of 1950.
own knowledge the within is a true return of and concerning the real property

Auditor

By

Taxpayer

TG 00100

Honolulu, T. H.February 11, 1960

TO: Mr. Paul J. Thurston

Director, Bureau of the Budget

RE: Claim of Lealia Muller-Lee for ^{remission} ~~refund~~ of Real
Property Taxes in the sum of \$ 175.32

In accordance with your request for a report relative to the above claim, the original attached herewith, I beg to report as follows:

1. Tax Key 3-9-01-1.
2. This claim is for a remission of a portion of the real property tax assessed upon the above tax key for the year 1959 in the First Taxation Division.
3. The above amount of \$175.32 covers the period from August 22, 1959 to December 31, 1959.
4. On admission of Hawaii as a State on August 21, 1959, Palmyra Island was not included as a part of the State of Hawaii.

In accordance with the above, I hereby recommend ~~do not recommend~~ to the Legislature that the above claim in the sum of \$ 175.32 be paid.

ATTEST:

February 11, 1960

Antt Hendry
 Deputy Director of Taxation
 Real Property Tax Bureau

m.d. 301

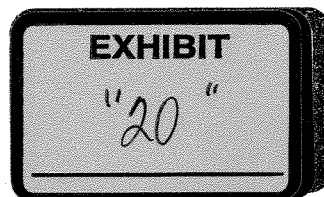
By Donna Dwyer
 (Title) Tax Assessor
 First Taxation Division

FLF 000344

MEMORANDUM

TO: Palmyra Atoll file
CC: Kelvin Taketa, ~~Peter Savio~~, Robert Smith, John Ford, Georgia Shirilla
FROM: Jim Maragos
DATE: August 19, 1991
SUBJECT: Minutes of 7/26/91 meeting on Palmyra Atoll held at TNC (DRAFT)

1. Representatives of The Nature Conservancy, Peter Savio Realty, U.S. Fish and Wildlife Service, and M & E Pacific met at 1300-1500 hours on 26 July 1991 at the Smith Street office to discuss proposed development and conservation plans for Palmyra Atoll. An attendance sheet is attached.
2. Peter Savio reviewed the TNC letter of 17 June 1991 and offered the following comments on behalf of his firm and the owners. He also sought clarification on some of the language in the letter.
 - A. The owners are nervous about collaborating with the federal government due to previous misfortunes. However, they support the development concept and do not object to USFWS/TNC involvement as long as Savio Development is involved and active. The owners do not favor a large scale development.
 - B. If Savio pulls out of the project, then the owners would not want USFWS/TNC as partner for further attempts at development and conservation. The owners are concerned that the federal government may try to condemn the atoll once the feds have a foothold.
 - C. The owners are also concerned that the feds will renege on an agreement to allow for development of Cooper Island.
 - D. Thus, Savio suggested a "buy out" option where TNC would be reimbursed, say \$500,000, to relinquish interest and compensate for commitment of resources for the Palmyra project.
 - E. Savio is open to other suggestions on resolving the owners objections.
3. Savio also reviewed the status of the project planning and provided copies of preliminary planning documents prepared by M & E. He did not agree with the concept as illustrated in the M & E report because too much space was taken up for housing and the plan for Cooper Island lacked a rural 19th century character as desired by Savio. He also wants to keep the atoll "interesting" for visitors. Quality, not quantity (number of units) is the goal.
4. Savio's arrangement with the owners is a 75 year lease with an option to buy within the first 5 years (4 years left). The owners also retain an "escape" clause which remains in effect for 3 years (2 years left). The owners would no longer be involved after Savio buys the atoll.



5. Both the owners and Savio envision Cooper Island being used for residential/vacation development (NTE 3 stories) with the remainder of the atoll designated as a reserve or park except for Sand Island, a small portion of Home Island, and navigation areas and anchorages in the west lagoon. Heirs of Judge Henry Cooper may have title to the parcels on Home Island and Savio intends to buy them out. *Clarify them as is or clarify what they own. no intention to buy them out.*
6. Savio doesn't want to run the park or reserve. He would like to see TNC/USFWS operate the park and he intends to raise or earmark the funds to support long-range management.
7. The big issue is Savio's mind is who controls what since two separate land "managers" will be operating jointly on the atoll. A balance needs to be achieved where one party does not have an unreasonable amount of control over the other.
8. Savio intends to sell 250+ lots for \$250,000 each (approximately) to raise the funds to restore/establish infrastructure and buy the atoll from the owners.
9. Savio mentioned that the owners believe they control all reefs and the territorial seas off Palmyra Atoll and they also claim Kingman Reef, the next atoll to the northwest. The owners may be interested in dedicating Kingman Reef for conservation. *The reef has little or no dry land and is not suitable for development. and on selling it for that purpose*
10. Savio intends to establish rules applicable to the future owners during the lease period for both ocean and land areas at Palmyra.
11. Proposed infrastructure improvements include restoring and paving the overgrown runway to accommodate Aloha Airline sized jet traffic. Savio cited an optimum load for each jet plane at about 120 passengers. Aloha is willing to fly to Palmyra once the runway is restored.
12. In working with TNC/USFWS, Savio would like to develop a plan to insure that Cooper Island development is compatible with the rest of the atoll as a reserve, and that compatible uses of the reserve by residents and authorized visitors be identified and agreed upon. The reserve and the atoll's natural resources will attract most visitor/buyers.
13. USFWS mentioned the threat of air strikes (collisions between birds and planes) if high levels of nesting continue on Cooper's runway. Savio would like to restore the old fighter strips in the south lagoon as prime nesting habitat for birds, consistent with previous high level use by nesting seabirds before the fighter islands were overgrown with vegetation.
14. USFWS pointed out that significant bird populations also occur elsewhere on Cooper Island. Maragos noted high population levels of nesting red-footed Boobies on trees lining the shoreline and large populations of black noddies in the crowns of coconut

trees and other large trees. Sea turtle nesting on the northwest beach of Cooper Island was also acknowledged. Smaller nesting colonies of sooty terns may occupy some of the flat lagoon-facing lands south of the runway. Savio/M & E have already identified a proposed reserve area that corresponds to the turtle nesting sites.

15. Savio noted that the jet runway will need to be paved and he prefers concrete over asphalt because long-term maintenance will be less costly. Clearing of the main runway has attracted birds (ground nesters).
16. Kelvin Taketa envisioned a single conservation easement with two parts, one controlled by Savio and the other by TNC/USFWS. Stewardship zones and guidelines (for public use) need to be set up. Enforcement of guidelines or regulations is also an issue: who will do it? How? Savio mentioned that pets/alien species would be banned from the atoll. In any case, one agreement needs to be drawn up with clear obligations articulated for both parties.
17. Savio passed on other perceptions by the owners. The TNC letter appears to grant TNC power to rule from the top. They want to explore an alternative hierarchy if Savio's development fails. The worst case scenario in the owners mind is that USFWS is part "owner" and then goes after the rest once Savio is out. Condemnation is a dirty word to the owners.
18. Kelvin Taketa acknowledged the risks to be taken by the owners and Savio indicated the need to seek permission from the owners to implement a plan as envisioned by TNC.
19. Savio indicated that the sales price for the atoll is \$36 million. The owners are willing to reduce the cost to \$33 million if USFWS is willing to buy. Working a deal with Savio and the owners may be a much cheaper way for TNC and the USFWS to establish strong conservation programs on the atoll.
20. Savio believes that Cooper Island offers the development potential, and it makes good economic sense to develop only Cooper Island. Somewhere between 200-300 single family lots are proposed with 2-3 bungalow hotels, one village center on the ocean side of Cooper, excluding Strawn Point. The lots would be priced at \$200 - 250K each. The maximum or "design" population on the atoll at any one time is estimated at 800.
21. It is not clear at this stage what federal approvals are needed. The sewage treatment plant and outfall will probably involve permits or approvals from the Corps of Engineers and U.S. EPA. Hawaii's statehood act specifically excludes Palmyra, and a presidential executive order signed by John Kennedy gives DOI administrative jurisdiction over the atoll.
22. Kelvin raised several issues and topics for further discussion and eventual agreement:

Transportation: people, goods, within the island
 Energy
 Waste Management: liquid, solid
 Location for development
 Types of uses

23. Savio indicated that people transportation would be primarily by boat and planes. Within the atoll, there would be a few hauling vehicles, but most transportation would be by foot or bicycle. Cars would not be allowed.
24. M & E Pacific is designing the power and wastewater systems. Injection wells, cesspools, or septic tanks are not feasible because of low elevation and nearness of groundwater to the ground surface. They are proposing a sequencing batching plant achieving secondary treatment quality. The sewage would then be conveyed by outfall to the deep ocean, most likely off the south side of the atoll near Engineer Island. M & E believes prevailing currents set to the west, but Maragos noted that the equatorial counter current runs east. Clearly there is a need to determine which direction prevailing currents run. The plant would be designed to accommodate 1,200 people. M & E mentioned the success of a Japanese engineered sewage treatment plant off the Hamakua coast after which the Palmyra STP would be patterned.
25. Savio proposed setbacks off the shoreline to insure there is adequate buffering of structures against waves, storm surges and other natural hazards. Savio welcomed any ideas and brainstorming on facilities design and siting.
26. In wrapping up the meeting, Jim Maragos identified five areas for future discussion and analysis and asked the group to designate participants and leaders to address these in more detail:
 - a) timing issue/buyout options (Kelvin, Robert, Suzanne, Peter and Edward)
 - b) uses on Cooper Island that would be compatible with the function and operation of the proposed refuge (John Engbring - lead)
 - c) acceptable uses on the refuge areas (reefs, lagoon, and islands) and access by visitors and residents of Cooper (Ken McDermott - lead)
 - d) assessment infrastructure impacts, mitigation, and development options (all participants, starting with the review of the M & E July 1991 report; copies were provided to USFWS and TNC; Jim will collate)
 - e) scheduling and scoping of field work (deferred).
27. The group felt that the other issues needed to be explored more fully before proceeding with field work. Certainly aerial photography could be flown initially to assist in all subsequent phases of planning, analysis and design. The biggest issue of course is how the timing of the agreement would be structured (item "a" above). The buy-out option proposed by Savio should be seriously considered. Transfer of Kingman Reef by the owners to the USFWS could also serve as compensation or mitigation for other impacts, and the USFWS is keenly interested in Kingman.

*Not sure if family would agree. May consider if
 donation would offset tax liability of Palmyra atoll.*

28. The group agreed to finish the above analyses within one month and then convene follow-up meetings. Ultimately, the exercise would lead to a clear understanding by each party of what the other side requires and can live with in terms of future development and use of the atoll. This could then lead to a written agreement enabling the effort to proceed to the next step.
29. The draft minutes were recorded and compiled by J.E. Maragos, Director, Conservation Science, The Nature Conservancy, Pacific Regional Office, Phone: 537-4508; fax: 545-2019. Please phone/fax any corrections to the draft of the minutes by 31 August so they can be finalized and sent out to all parties.
30. Attendance Sheet:

Anne Ulaszewski (M & E Pacific, Inc.) 521-3051
Jim Maragos (TNC Pacific) 537-4508
John Engbring (USFWS) 541-2749
Peter Savio (Savio Realty) 942-7701
Suzanne Case (TNC, Regional Counsel) (415)777-0487
Robert P. Smith (USFWS) 541-2749
Dail Rhee (M & E Pacific) 521-3051
Andrew Yuen (USFWS) 541-2749
Georgia Shirilla (USFWS) (503)231-2236
Kelvin Taketa (TNC, Regional Director) 537-4508
Beth Flint (USFWS) 541-1201
Jerry Leinecke (USFWS) 541-1201
Edward R. Brooks (Foley, Machara et al - Savio's attorney) 526-3011
Ken McDermott (USFWS) 526-3011

PALMYRA DEVELOPMENT CO., INC.

931 University Avenue, Suite 105

Honolulu, Hawaii 96826

Phone #: (808) 942-7701/ Facsimile #: (808) 947-5429

August 1, 1997

Mr. Joe Dettling
74-4950 Palani Road
Kailua-Kona, Hawaii 96740

Dear Mr. Dettling:

It has come to our attention that you have been fishing in and around Palmyra Island and Kingman Reef. Both islands are privately owned by the Fullard-Leo family.

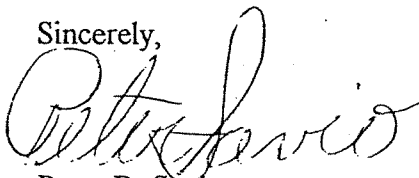
We also understand that you may be planning to use the lagoons of both islands for a seaplane/fishing operation.

Since the islands, lagoons, reefs and territorial waters are private property, you are advised that you cannot enter into these areas without permission.

If you continue to disregard the owners' rights, we will take legal action against you to enforce the owners' rights.

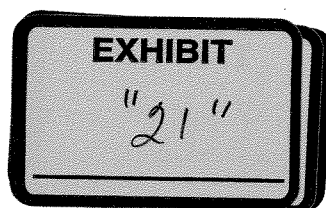
If you have any questions and/or need any clarification, please feel free to call me.

Sincerely,



Peter B. Savio
President

PBS:sm
o:\sdc\projects\palmyra\ltr\detting



FLF 002253

Preliminary Project Proposal

Line Islands Units
(Palmyra Atoll and Kingman Reef)

Remote Islands National Wildlife Refuge Complex
Honolulu, Hawaii

August 1997

Introduction: The U.S. Fish and Wildlife Service (Service) is proposing to study the addition of Palmyra Atoll and Kingman Reef, atolls located in the Pacific Ocean in the northern Line Islands, as units of the Remote Islands National Wildlife Refuge Complex (Refuge Complex). The proposed refuge units could provide the Service with the ability to conserve unique equatorial resources of the United States, including native *Pisonia* forests and other essential habitats of large numbers of migratory Pacific seabirds and shorebirds, endangered and threatened sea turtles, endangered monk seals, and other marine life associated with these atolls.

Location and Size: Both atolls are located in the northern end of the Line Islands Archipelago in the equatorial Pacific (figure 1). Palmyra Atoll is located approximately 1,700 kilometers (1,057 miles) south of Honolulu at latitude 5°53' N, longitude 162°05' W (figure 2). The outer reef is approximately 4.8 kilometers (3 miles) wide by 8 kilometers (5 miles) long. Approximately 52 islets totalling 275 hectares (680 acres) comprise the emergent land at Palmyra Atoll.

Kingman Reef is the northernmost atoll in the Line Islands Archipelago (figure 3). It is located approximately 1,480 kilometers (920 miles) south of Honolulu at latitude 6°23' N, longitude 162°25' W, and is approximately 53 kilometers (33 miles) northwest of Palmyra Atoll. Kingman Reef is a submerged atoll reef that is triangular in shape with its apex to the north. The reef is approximately 8 kilometers (5 miles) long and 15 kilometers (9 miles) wide at its base. Although there is no permanent emergent land at Kingman Reef, a small sand spit approximately 40 meters (131 feet) long and 1 meter (3 feet) above sea level occurs on the east side of the reef.

Description of Habitat: Palmyra Atoll and Kingman Reef are located within an area of the equatorial Pacific Ocean known as the "Intertropical Convergence Zone." In this zone, northeast and southeast tradewinds meet and low pressure causes almost constant clouds and rain. The nutrient rich waters of the north equatorial countercurrent are important feeding grounds for nesting birds of Palmyra Atoll and contribute to the rich ocean resources found at both Palmyra Atoll and Kingman Reef.

EXHIBIT

"22"

Palmyra Atoll. Palmyra Atoll consists of approximately 52 heavily vegetated, low-lying islets with a maximum elevation of approximately 2.1 meters (7 feet) above sea level. The islets are made up primarily of a limestone base with a thin layer of organic soil in vegetated areas. The islets encircle three central lagoons (with depths up to 53 meters or 174 feet). The islets are surrounded on the seaward side by extensive reef flats to the north, south, and west.

Palmyra Atoll's location within the Intertropical Convergence Zone results in an unusually high rainfall that averages 4,400 millimeters (175 inches) annually. The temperature varies little, averaging 26.6°C (80°F) and ranges from 23.9-29.4°C (75-85°F). The atoll is occasionally hit by strong tropical storms bringing high winds and waves.

The islets of Palmyra Atoll are covered with a dense jungle of native *Pisonia grandis* wet forest. This is one of two *Pisonia* forest natural communities under United States' jurisdiction in the Pacific (the other, being a small patch at Rose Atoll National Wildlife Refuge in the south Pacific), and is one of the few remaining intact stands throughout the Pacific. The wet forests support a number of fern species including bird's nest fern (*Asplenium nidus*), lau'ae fern (*Phymatosorus scolopendria*), and swordfern (*Nephrolepis hirsutula*). The *Pisonia* forests on Palmyra Atoll provide important breeding and roosting sites for tree-nesting seabirds. Native coastal strand plants (such as beach naupaka and tree heliotrope) are found primarily around the shoreline areas and provide nesting and roosting sites for the Red-footed Booby and Great Frigatebird. Nonnative plants include coconuts (*Cocos* sp.) and a variety of introduced ornamentals. The central islet contains open *Lepturus* grasslands that are important nesting areas for large Sooty Tern (*Sterna fuscata*) colonies and feeding sites for migratory shorebirds. Intertidal mudflats, exposed during low tide, provide rich foraging for migratory shorebirds.

A wide beach located on the northwestern shore of Cooper Island is a site for threatened green sea turtles nesting. Numerous stretches of narrow white sand beach are found bordering various islets. The waters of the lagoon, coral reef, and ocean support large populations of marine organisms.

Navy occupation of Palmyra Atoll during and following World War II resulted in changes to the atoll. The lagoons, entrance channel, and a deep harbor were dredged; a 1,829-meter (6,000-foot) runway and two smaller airstrips were built; a causeway that joined a number of islets and divided one of the lagoons was built; and facilities to support a large military base were developed. Most of the Navy buildings have been demolished, although a few still remain in a deteriorated condition. The former roads have deteriorated and the main causeway has been breached in several places. The two runways are being overgrown with vegetation, although one runway has been cleared periodically by hand.

Kingman Reef. There is no permanent terrestrial land at Kingman Reef, although a sand spit serves as turtle nesting habitat. The major habitats of Kingman Reef are the unexploited coral reef and deep water marine communities. The reef encircles a deep central lagoon with depths ranging from approximately 18 meters (60 feet) to 91 meters (300 feet).

Major Wildlife Values:

Palmyra Atoll. Palmyra Atoll supports colonies of international importance for several species of Pacific migratory seabirds. Twenty-nine species of birds have been recorded at Palmyra Atoll (appendix A), including the largest nesting colony of the Red-footed Booby (*Sula sula*)¹ and Black Noddy Tern (*Anous minutus*) in the central Pacific. Other important nesting species include the Brown Noddy Tern (*Anous stolidus*), large colonies of the Sooty Tern (*Sterna fuscata*), as well as the White Tern (*Gygis alba*), Brown Booby (*Sula leucogaster*), and Great Frigatebird (*Fregata minor*). Other breeding seabirds include the White-tailed Tropicbird (*Phaethon lepturus*), Red-tailed Tropicbird (*Phaethon rubricauda*), and Masked Booby (*Sula dactylatra*).

The rocky shoreline and extensive mudflats are important wintering areas for migratory shorebirds, including the Pacific Golden Plover (*Pluvialis fulva*), Ruddy Turnstone (*Arenaria interpres*), and Wandering Tattler (*Heteroscelus incanus*). The Bristle-thighed Curlew (*Numenius tahitiensis*), a species of management concern, is found in relatively high numbers on Palmyra Atoll. Biologists counted 227 Bristle-thighed Curlews on Palmyra Atoll in 1992, a significant number in light of a recent world population estimate of only 7,000 individuals. Oceanic islands in the Pacific serve as vital wintering locations for adults and as year-round residences for juveniles younger than 3 years of age. The wintering birds undergo a flightless period during molt that makes predator-free sites essential to them. Four of the curlews sighted in 1992 had color bands that had been placed on them at their Alaskan breeding sites.

Nesting by the threatened green sea turtle (*Chelonia mydas*) has been observed on Cooper Island. The endangered hawksbill sea turtle (*Eretmochelys imbricata*) is regularly sighted in the waters of the atoll. The pilot whale (*Globicephala macrorhynchus*) and bottle-nosed dolphin (*Tursiops truncatus*) have been reported in the lagoon. The endangered Hawaiian monk seal (*Monachus schauinslandi*) has been sighted on two separate occasions within the atoll.

A 1990 oceanographic survey of the north Equatorial Countercurrent by the National Marine Fisheries Service found the current and the lagoons of Palmyra Atoll to be rich in fishes and their larvae. The lagoon waters and reefs of the atoll support large numbers of fish including mullet, milkfish, blacktip reef sharks, bonefish, and other species. The ocean near Palmyra Atoll is reported by the State of Hawaii as having abundant tuna resources.

Palmyra Atoll has a number of terrestrial crabs including hermit crabs (*Coenobita brevipennis* and *C. perlata*), a native land crab (*Cardisoma carnifex*), and the coconut crab (*Birgus latro*). Many of these species, particularly the coconut crab, are imperiled in other parts of the Pacific

¹ On a worldwide basis, the Red-footed Booby colony at Palmyra Island is second in size only to the colony in the Galapagos Islands in the eastern Pacific.

due to overexploitation by humans. Important marine molluscs include the giant clam (*Tridacna maxima*), a species protected by CITES, and pearl oysters of the family Pteriidae.

Kingman Reef. Kingman Reef is reported to support a largely unexploited marine natural community including coral reef species and open water pelagic fish species. There is likely an island effect at Kingman Reef that enhances the value of the surrounding waters to foraging pelagic seabirds.

Relationship of Project to the Pacific Islands Ecosystem's Management Goals and Objectives: Of all Pacific islands under U.S. control in the Pacific, Palmyra Atoll is unique in terms of latitude and vegetation. Its high rainfall and complex vegetation structure make it very different from all of the other seabird colonies already receiving protection in the Pacific Islands Ecoregion. Protection and management of Palmyra Atoll and Kingman Reef would contribute significantly to the conservation of migratory birds in the Pacific, as well as to the recovery of endangered and threatened sea turtles, and population maintenance of the endangered Hawaiian monk seal. Protection of Palmyra Atoll and Kingman Reef is specifically identified in the draft *Plan for the Pacific Islands Ecoregion* (Ecoregion Plan) under Objective 8: "By the year 2014, secure lasting protection for the most intact areas of native habitat remaining in the Hawaiian and Pacific Islands, preventing their fragmentation and enhancing the functioning of their ecosystem."

Related Resources: The avian species of the Line Islands in the Republic of Kiribati are protected by Kiribati law, but many seabirds are eaten by island residents. Kiribati is considered a poor nation and the government has very little funds for wildlife management, protection, or enforcement even though Malden, Starbuck, Vostok, and parts of Christmas (Kiritimati) are designated as wildlife sanctuaries. Poaching and introduced mammalian predators (rats, cats, dogs) have extirpated ground nesting bird populations in most of the Line Islands. There is no information readily available on the status of sea turtles or fish resources management in Kiribati.

Howland, Baker, and Jarvis National Wildlife Refuges are located near Palmyra Atoll and Kingman Reef in the Pacific equatorial region. These small equatorial Refuges are semi-arid and do not feature the extensive lagoon sand-and-mudflats or *Pisonia grandis* forest habitats found on Palmyra Atoll. Establishment of a staffed refuge at Palmyra could assist with logistic support for management of other equatorial remote islands.

Palmyra Atoll and Kingman Reef are surrounded by the 200-nautical mile U.S. Fishery Conservation Zone (FCZ), within which fishery resources are managed and regulated by the Western Pacific Regional Fisheries Management Council.

No archaeological remains or historic sites have been found on Palmyra Atoll, although evidence of early Polynesian settlements can be inferred from coconut groves on the island.

Pre-existing Wildlife-dependent Recreational Uses:

Palmyra Atoll. The current owners and their lessee allow yachters to visit Palmyra Atoll only with permission. Visitors to the atoll engage in wildlife viewing and some sport-fishing for reef fishes, pelagic fishes, and reef invertebrates. The owners forbid the taking of coconut crabs.

Kingman Reef. Explorers wishing to visit Kingman Reef must secure permission from the Fullard-Leo family and the U.S. Coast Guard. Recreational uses that rarely occur may include sport fishing, diving, and wildlife observation.

Threats:

Palmyra Atoll. Palmyra Atoll's isolation and small size make resident wildlife particularly vulnerable to loss of habitat or degradation of habitat quality. Seabirds are sensitive to human disturbance which can disrupt nesting. Large nesting colonies of Sooty Tern are vulnerable to habitat loss when grass areas are converted to runways or roads. Other threats to the wildlife resources of Palmyra Atoll include predation by nonnative mammals (e.g., black rats, domestic dogs, pigs, and cats); displacement of native plants through the spread of invasive nonnative species; oil spills; and terrestrial and marine debris. Palmyra Atoll has been considered for a number of large development projects including a fish processing plant; nuclear waste storage facility; marine mineral processing station; and various resort proposals. Poaching occurs periodically on this remote, isolated atoll.

Kingman Reef. The primary threats to the natural resources at Kingman Reef are oil spills, shipwrecks, and poaching.

Water Availability and Water Rights: There are no water resources or water rights issues associated with the proposed acquisition at Palmyra Atoll and Kingman Reef.

Justification and Funding: Trust resources present at Palmyra Atoll and Kingman Reef fall under the authorities of the Migratory Bird Treaty Act, Endangered Species Act, and Marine Mammal Protection Act. The protection and management of natural resources at Palmyra Atoll and Kingman Reef would contribute to the protection and recovery of endangered and threatened species. It would also contribute to the protection of significant native biodiversity including world-class migratory seabird colonies and outstanding marine resources; and could provide opportunities for compatible ecotourism. The wet *Pisonia* equatorial forest ecosystem found on Palmyra Atoll is not represented in the National Wildlife Refuge System and is considered to be an imperiled ecosystem globally. Funding for acquisition would be sought from the Land and Water Conservation Fund.

Ownership and Type of Acquisition:

Palmyra Atoll. Palmyra Atoll is currently owned by the Fullard-Leo family of Honolulu, Hawaii except for two parcels on Home Island that are owned by the Cooper family. The atoll is under the administrative jurisdiction of the Department of the Interior. The Service is proposing to study fee title acquisition of Palmyra Atoll from the center of the atoll to the 3-nautical mile limit. There may be an opportunity for the Service to enter into a cooperative partnership with a private partner to provide refuge unit logistic support and opportunities for compatible ecotourism.

Kingman Reef. Kingman Reef was annexed on behalf of the United States in 1922, by the Palmyra Copra Company (Fullard-Leo family), and the family claims ownership. It is an unincorporated U.S. possession administered by the U.S. Department of the Navy. The Service is proposing to study fee title acquisition of Kingman Reef from the center of the atoll to the 3-nautical mile limit.

Initial and Annual Costs: There are no comparable sales of a private Pacific Island on which to base an estimate of the sale price of Palmyra Atoll, although published listing prices have ranged from \$30 million in 1988 to \$36 million in 1996. The Nature Conservancy is considering funding an appraisal immediately, and it is believed that the results may show a significantly lower value (\$15 million) than earlier value estimates. The landowners are reportedly willing to sell their lands to prevent heirs from acquiring a large inheritance tax debt. This willingness to sell, coupled with a desire to perpetuate the natural values of the atoll, could result in a more favorable price for the Service. Partnerships with national or international conservation agencies, like The Nature Conservancy, could help with the funds for acquisition. There is a very real possibility that a portion of the property could be purchased by the private sector for conservation and wildlife recreation purposes, thus significantly reducing the costs to the Federal government.

Similarly, the price for fee title to Kingman Reef is unknown. Due to the negligible commercial real estate value, it might be possible to include it in the purchase price negotiated for Palmyra.

Start up-costs for Palmyra Atoll would total \$75,000 and include \$30,000 for a detailed environmental survey, \$25,000 for refuge management planning, and \$20,000 for a field camp facility development. These costs could be offset through partnership programs to conduct surveys, initiate management activities, and to develop the facilities.

Annual costs for operating remote island refuges are higher than those of most refuges in the National Wildlife Refuge System, due primarily to the cost of transporting personnel and equipment to and from remote stations, remote duty station pay adjustments, and the need for more frequent equipment maintenance or replacement due to the highly corrosive marine environments. Should a Refuge headquarters be established on the atoll, annual refuge operations and maintenance costs are estimated at \$500,000 and include boats, equipment,

salaries, and transportation. At this level of management, there would be a Refuge Manager, an Assistant Refuge Manager, a Biologist, and Maintenance Worker on staff.

Start up costs for the management of Kingman Reef would be nominal and are estimated at \$30,000. This would include the cost of a natural resources survey and management plan. Annual operating and maintenance costs (estimated to be \$20,000) would also be nominal since the Service would likely maintain the atoll in a custodial status with periodic resource monitoring and law enforcement expeditions.

In the case of some private-sector ownership at Palmyra, it may be possible for the Service to use living quarters and office space on private property, under a cooperative agreement. Service employees would provide interpretive tours for visitors and assist the private sector with any wildlife-related issues associated with ecotourism or wildlife-dependent recreation. This arrangement, modeled after the public/private partnership at Midway Atoll National Wildlife Refuge, may further reduce operational costs to the Service.

Contaminants and Hazardous Wastes: Contaminants and hazardous wastes that may be present on Palmyra are believed to be typical of industrial and military wastes commonly dumped or stored on other Pacific atolls (e.g., PCB's, solvents, cleaners, oils, paints, etc.). The Service has identified barrel dumps, transformers, an old hospital site, a munitions bunker, and underground fuel storage tanks during preliminary site surveys. The U.S. Army Corps of Engineers has conducted site assessments of Palmyra Atoll and is reportedly beginning restoration efforts. The landowners have requested that detailed data and reports of contaminants not be disclosed at this time. This information could reduce the cost of the preacquisition contaminants survey at Palmyra Atoll.

If contaminants and hazardous wastes are present at Kingman Reef, they are likely under water. Unauthorized ocean dumping could have been conducted in the area, and unexploded ordnance could exist. The Service would need to conduct a preacquisition contaminants survey at Kingman Reef.

Public Attitude and Involvement: The landowners are willing to consider an offer from the Service, but remain open to the possibility of purchase by outside interests (e.g., nuclear waste storage companies) because of economic considerations.

The conservation community is expected to support the establishment of refuge units at Palmyra Atoll and Kingman Reef. The Nature Conservancy fully supports the Service's proposal to protect Palmyra Atoll. Strong negative reactions from the public and congressional delegation to a nuclear waste storage proposal in 1996 might indicate that there would be a favorable response to the establishment of a refuge unit at Palmyra Atoll. Support from other organizations concerned with conservation of Pacific wildlife resources is expected.

Findings and Recommendations: The proposal to acquire Palmyra Atoll and Kingman Reef to be managed as units of the Remote Islands National Wildlife Refuge Complex has sufficient merit and support to warrant initiation of the detailed planning process to expand the Refuge Complex. This Preliminary Project Proposal is being submitted at an early stage of project planning for the Director's approval to conduct detailed acquisition planning. Upon approval of this document, preparation of a draft environmental assessment and other preacquisition planning documents should begin in accordance with the National Environmental Policy Act process and other requirements.

Appendix A. Selected wildlife of Palmyra Atoll.

	Common name:	Scientific name:	Federal status:	Occurrence at Palmyra:
AVIFAUNA				
	Audubon's Shearwater	<i>Puffinus lherminieri</i>	Migratory	Visitor
	White-tailed Tropicbird	<i>Phaethon lepturus</i>	Migratory	Breeding
	Red-tailed Tropicbird	<i>Phaethon rubricauda</i>	Migratory	Breeding
	Masked Booby	<i>Sula dactylatra</i>	Migratory	Breeding
	Brown Booby	<i>Sula leucogaster</i>	Migratory	Breeding
	Red-footed Booby	<i>Sula sula</i>	Migratory	Breeding
	Great Frigatebird	<i>Fregata minor</i>	Migratory	Breeding
	Lesser Frigatebird	<i>Fregata ariel</i>	Migratory	Visitor
	Pacific Golden-plover	<i>Pluvialis fulva</i>	Migratory	Wintering
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	Ruddy Turnstone	<i>Arenaria interpres</i>	Migratory	Wintering
	Wandering Tattler	<i>Heteroscelus incanus</i>	Migratory	Wintering
	Bristle-thighed Curlew	<i>Numenius tahitiensis</i>	Migratory	Wintering
	Laughing Gull	<i>Larus atricilla</i>	Migratory	Accidental
	Franklin's Gull	<i>Larus pipixcan</i>	Migratory	Accidental
	Sooty Tern	<i>Sterna fuscata</i>	Migratory	Breeding
	Great Crested Tern	<i>Sterna bergii</i>	none	Visitor
	Brown Noddy	<i>Anous stolidus</i>	Migratory	Breeding
	Black Noddy	<i>Anous minutus</i>	Migratory	Breeding
	White Tern	<i>Gygis alba</i>	Migratory	Breeding
	Mallard	<i>Anas platyrhynchos</i>	Migratory	Visitor
	Northern Pintail	<i>Anas acuta</i>	Migratory	Visitor
	Green-winged Teal	<i>Anas crecca carolinensis</i>	Migratory	Visitor

	Common name:	Scientific name:	Federal status:	Occurrence at Palmyra:
	Eurasian Widgeon	<i>Anas penelope</i>	Migratory	Visitor
	American Widgeon	<i>Anas americana</i>	Migratory	Visitor
	Northern Shoveler	<i>Anas clypeata</i>	Migratory	Visitor
	Cattle Egret	<i>Bubulcus ibis</i>	Migratory	Visitor

MARINE REPTILES:

	Green sea turtle	<i>Chelonia mydas</i>	Threatened	Breeding
	Hawksbill turtle	<i>Eretmochelys imbricata</i>	Endangered	Resident

MARINE MAMMALS:

	Pilot whale	<i>Globicephala macrorhynchus</i>	-	Native
	Hawaiian monk seal	<i>Monachus schauinslandi</i>	Endangered	Native
	Bottle-nosed dolphin	<i>Tursiops truncatus</i>	-	Native

TERRESTRIAL ARTHROPODS:

	Coconut crab	<i>Birgus latro</i>	-	Native
	Land crab	<i>Cardisoma carnifex</i>	-	Native
	Land hermit crab	<i>Coenobita brevimanus</i>	-	Native
	Land hermit crab	<i>Coenobita perlatus</i>	-	Native

MARINE INVERTEBRATES:

	Giant clam	<i>Tridacna maxima</i>	CITES	Native
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INTRODUCED VERTEBRATES:

	Marine Toad	<i>Bufo marinus</i>	-	Introduced
	Domestic chicken	<i>Gallus gallus</i>	-	Introduced
	Domestic cat	<i>Felis catus</i>	-	Introduced
	Dog	<i>Canis familiaris</i>	-	Introduced
	Domestic pig	<i>Sus scrofa</i>	-	Introduced
	Black rat	<i>Rattus rattus</i>	-	Introduced

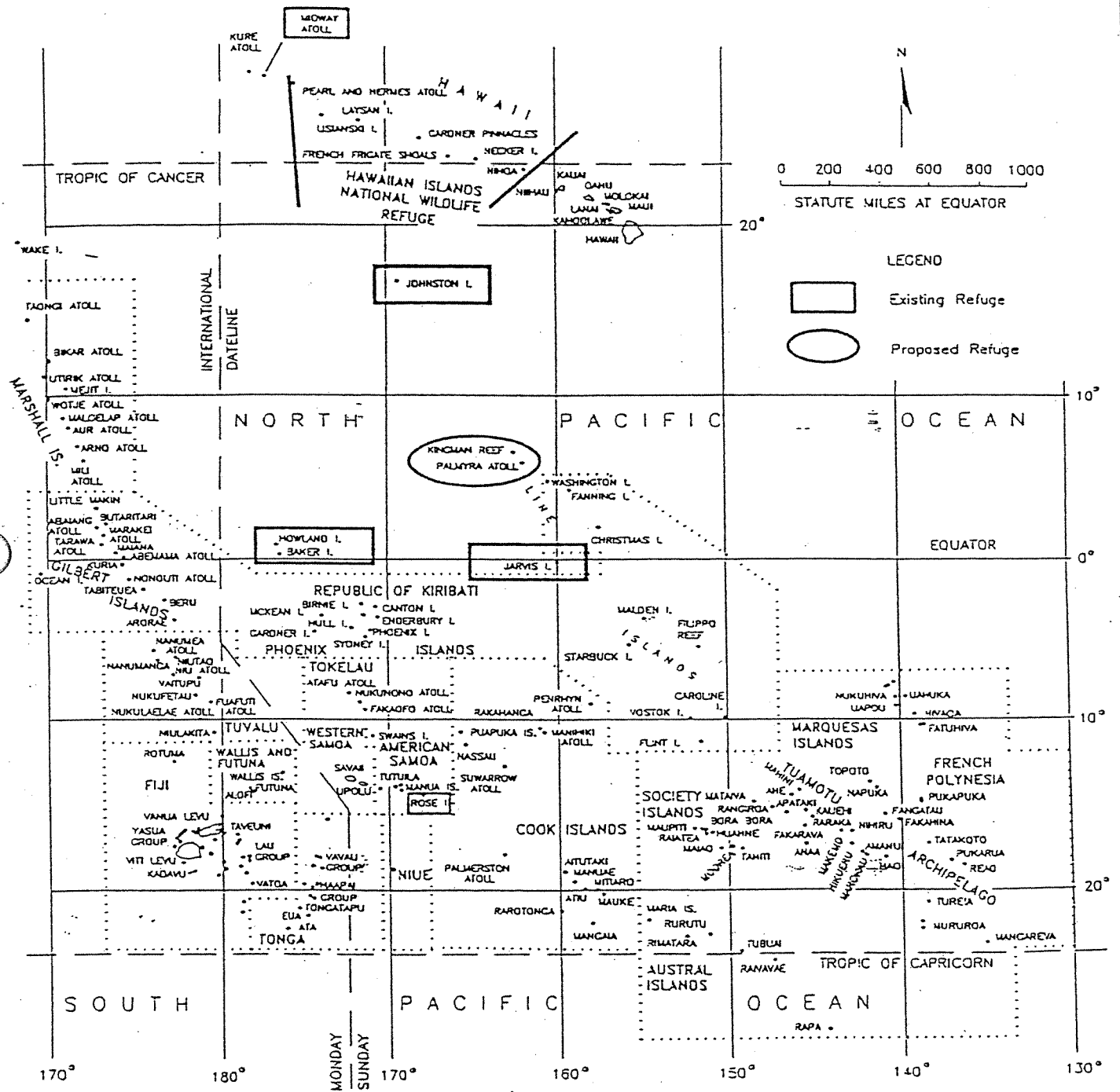
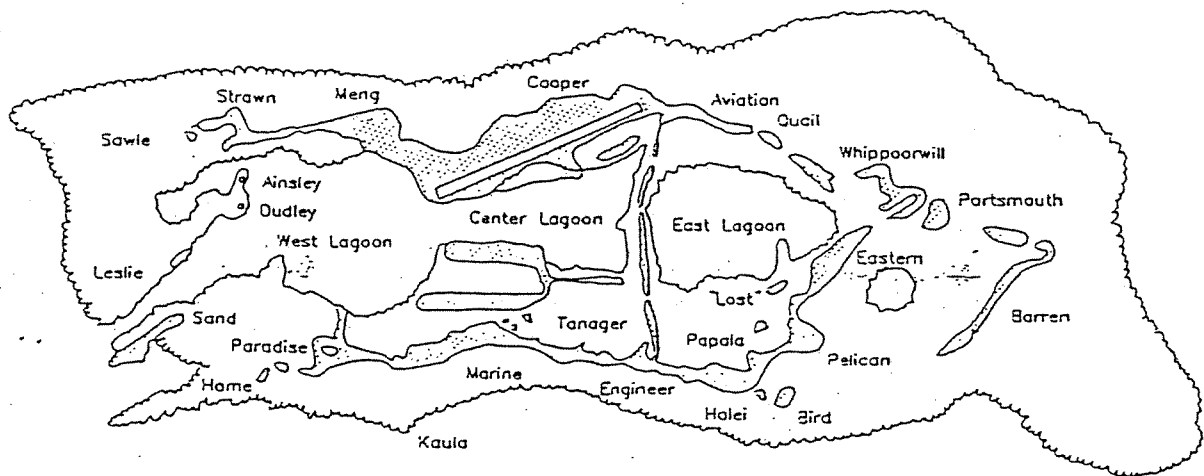
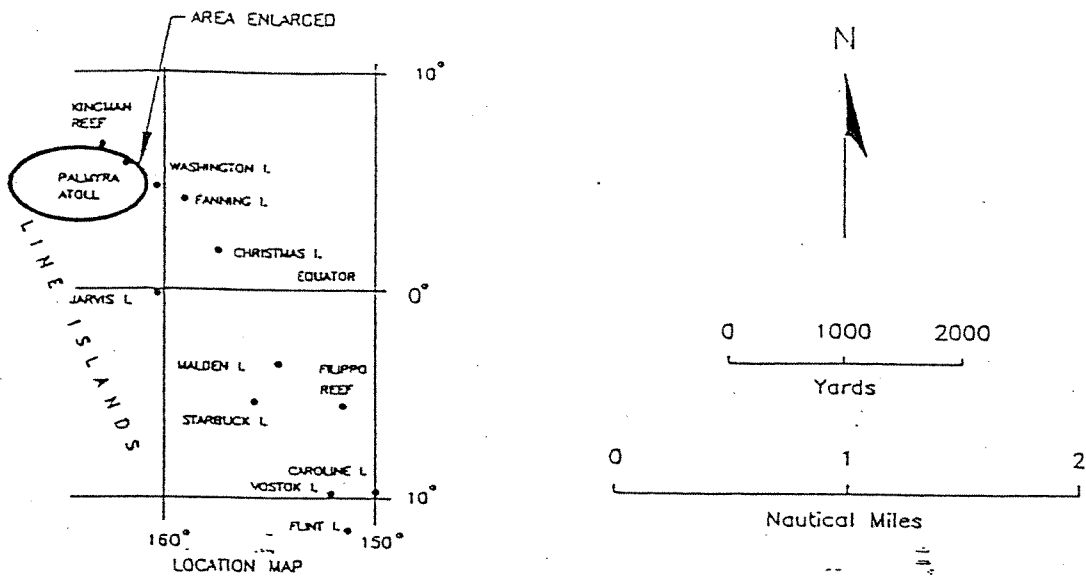


Figure 1. Proposed Line Islands Units, Palmyra Atoll and Kingman Reef



LEGEND



-  Emergent land
-  Shallow reef

Figure 2. Palmyra Atoll.

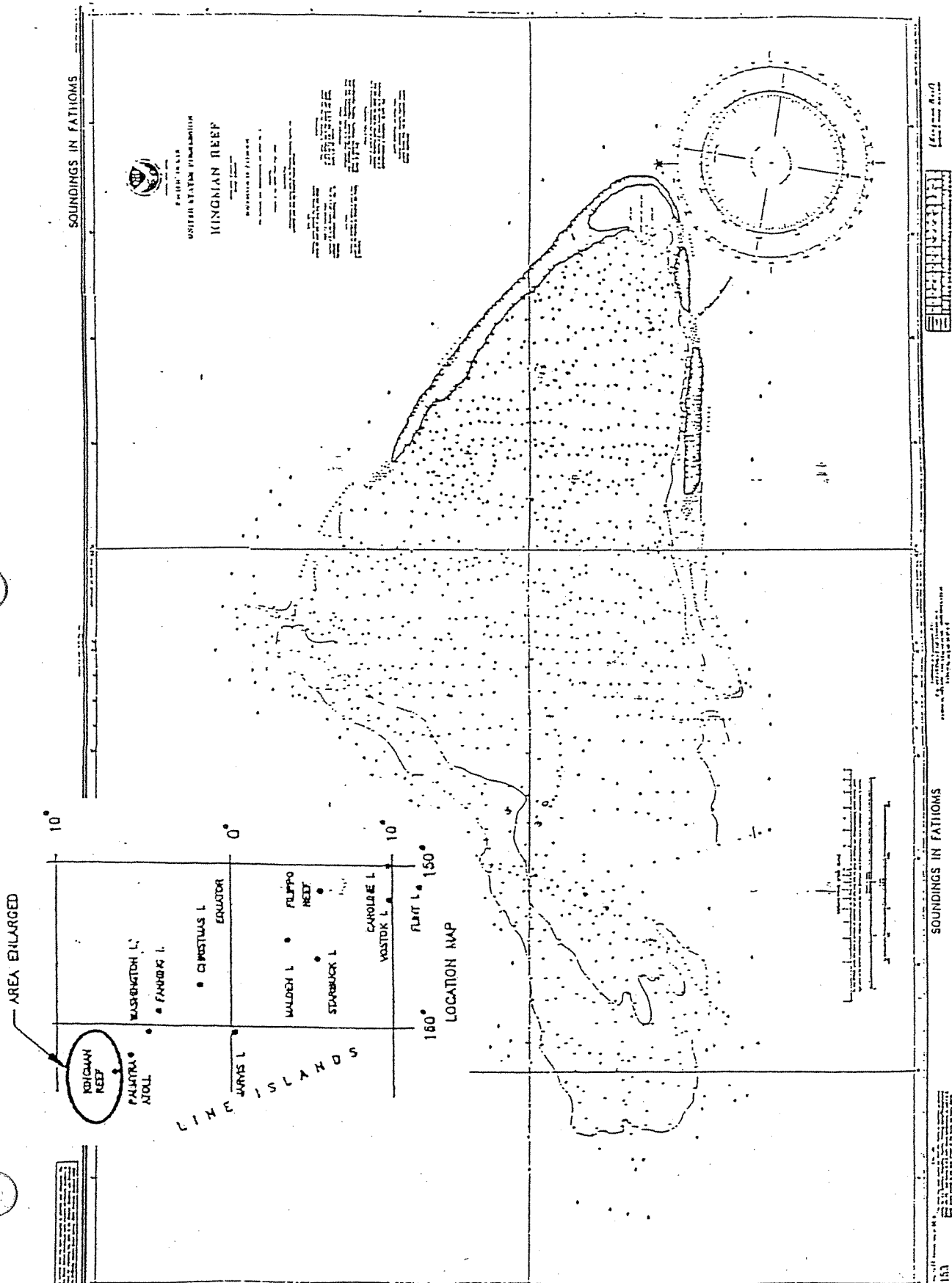


Figure 3. Chart of Kingman Reef, Line Islands.

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Kingman Reef



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington, D.C. 20240

In Reply Refer To:
FWS/RE97-00155

Memorandum

To: Regional Director, Region 1

From:

Director

OCT 2 1997

Subject: Preliminary Project Proposal for the establishment of
Palmyra Atoll National Wildlife Refuge and Kingman Reef
National Wildlife Refuge

Your proposal to proceed with detailed planning on the establishment of the above named National Wildlife Refuges is approved.

These additions to the refuge system will provide the Service the ability to conserve unique equatorial resources of the United States, including native *Pisonia* forests and other essential habitats for large numbers of migratory Pacific sea birds and shorebirds, endangered and threatened sea turtles, endangered monk seals and other marine life associated with these atolls.

We have concerns about the possible contamination problems associated with the past military use of the areas. The Service has already identified several potential problems in preliminary site surveys. This approval is contingent upon satisfactory results from contamination investigations. Close coordination between the Service and the Corps of Engineers in the restoration efforts on Palmyra Atoll will be critical to the success of this portion of the proposal.

The proposal identified these refuges as "Line Islands Units", but no refuge named "Line Island" exists. Due to the isolated nature of these islands and the existing classification of other island refuges in the Pacific each area should be a National Wildlife Refuge. For administration purposes they may be managed by the Remote Islands NWR Complex office in Honolulu.

The detailed planning process must include compliance with the National Environmental Policy Act and other applicable laws, regulations, and orders. Please forward three copies of the draft and final planning documents to the Assistant Director - Refuges and Wildlife (ARW/RE).

EXHIBIT

"23"

FWS 00223

Preliminary Project Proposal

Line Islands Units
(Palmyra Atoll and Kingman Reef)

Remote Islands National Wildlife Refuge Complex
Honolulu, Hawaii

August 1997

Introduction: The U.S. Fish and Wildlife Service (Service) is proposing to study the addition of Palmyra Atoll and Kingman Reef, atolls located in the Pacific Ocean in the northern Line Islands, as units of the Remote Islands National Wildlife Refuge Complex (Refuge Complex). The proposed refuge units could provide the Service with the ability to conserve unique equatorial resources of the United States, including native *Pisonia* forests and other essential habitats of large numbers of migratory Pacific seabirds and shorebirds, endangered and threatened sea turtles, endangered monk seals, and other marine life associated with these atolls.

Location and Size: Both atolls are located in the northern end of the Line Islands Archipelago in the equatorial Pacific (figure 1). Palmyra Atoll is located approximately 1,700 kilometers (1,057 miles) south of Honolulu at latitude 5°53' N, longitude 162°05' W (figure 2). The outer reef is approximately 4.8 kilometers (3 miles) wide by 8 kilometers (5 miles) long. Approximately 52 islets totalling 275 hectares (680 acres) comprise the emergent land at Palmyra Atoll.

Kingman Reef is the northernmost atoll in the Line Islands Archipelago (figure 3). It is located approximately 1,480 kilometers (920 miles) south of Honolulu at latitude 6°23' N, longitude 162°25' W, and is approximately 53 kilometers (33 miles) northwest of Palmyra Atoll. Kingman Reef is a submerged atoll reef that is triangular in shape with its apex to the north. The reef is approximately 8 kilometers (5 miles) long and 15 kilometers (9 miles) wide at its base. Although there is no permanent emergent land at Kingman Reef, a small sand spit approximately 40 meters (131 feet) long and 1 meter (3 feet) above sea level occurs on the east side of the reef.

Description of Habitat: Palmyra Atoll and Kingman Reef are located within an area of the equatorial Pacific Ocean known as the "Intertropical Convergence Zone." In this zone, northeast and southeast tradewinds meet and low pressure causes almost constant clouds and rain. The nutrient rich waters of the north equatorial countercurrent are important feeding grounds for nesting birds of Palmyra Atoll and contribute to the rich ocean resources found at both Palmyra Atoll and Kingman Reef.

Palmyra Atoll. Palmyra Atoll consists of approximately 52 heavily vegetated, low-lying islets with a maximum elevation of approximately 2.1 meters (7 feet) above sea level. The islets are made up primarily of a limestone base with a thin layer of organic soil in vegetated areas. The islets encircle three central lagoons (with depths up to 53 meters or 174 feet). The islets are surrounded on the seaward side by extensive reef flats to the north, south, and west.

Palmyra Atoll's location within the Intertropical Convergence Zone results in an unusually high rainfall that averages 4,400 millimeters (175 inches) annually. The temperature varies little, averaging 26.6°C (80°F) and ranges from 23.9-29.4°C (75-85°F). The atoll is occasionally hit by strong tropical storms bringing high winds and waves.

The islets of Palmyra Atoll are covered with a dense jungle of native *Pisonia grandis* wet forest. This is one of two *Pisonia* forest natural communities under United States' jurisdiction in the Pacific (the other, being a small patch at Rose Atoll National Wildlife Refuge in the south Pacific), and is one of the few remaining intact stands throughout the Pacific. The wet forests support a number of fern species including bird's nest fern (*Asplenium nidus*), lau'ae fern (*Phymatosorus scolopendria*), and swordfern (*Nephrolepis hirsutula*). The *Pisonia* forests on Palmyra Atoll provide important breeding and roosting sites for tree-nesting seabirds. Native coastal strand plants (such as beach naupaka and tree heliotrope) are found primarily around the shoreline areas and provide nesting and roosting sites for the Red-footed Booby and Great Frigatebird. Nonnative plants include coconuts (*Cocos* sp.) and a variety of introduced ornamentals. The central islet contains open *Lepturus* grasslands that are important nesting areas for large Sooty Tern (*Sterna fuscata*) colonies and feeding sites for migratory shorebirds. Intertidal mudflats, exposed during low tide, provide rich foraging for migratory shorebirds.

A wide beach located on the northwestern shore of Cooper Island is a site for threatened green sea turtles nesting. Numerous stretches of narrow white sand beach are found bordering various islets. The waters of the lagoon, coral reef, and ocean support large populations of marine organisms.

Navy occupation of Palmyra Atoll during and following World War II resulted in changes to the atoll. The lagoons, entrance channel, and a deep harbor were dredged; a 1,829-meter (6,000-foot) runway and two smaller airstrips were built; a causeway that joined a number of islets and divided one of the lagoons was built; and facilities to support a large military base were developed. Most of the Navy buildings have been demolished, although a few still remain in a deteriorated condition. The former roads have deteriorated and the main causeway has been breached in several places. The two runways are being overgrown with vegetation, although one runway has been cleared periodically by hand.

Kingman Reef. There is no permanent terrestrial land at Kingman Reef, although a sand spit serves as turtle nesting habitat. The major habitats of Kingman Reef are the unexploited coral reef and deep water marine communities. The reef encircles a deep central lagoon with depths ranging from approximately 18 meters (60 feet) to 91 meters (300 feet).

Major Wildlife Values:

Palmyra Atoll. Palmyra Atoll supports colonies of international importance for several species of Pacific migratory seabirds. Twenty-nine species of birds have been recorded at Palmyra Atoll (appendix A), including the largest nesting colony of the Red-footed Booby (*Sula sula*)¹ and Black Noddy Tern (*Anous minutus*) in the central Pacific. Other important nesting species include the Brown Noddy Tern (*Anous stolidus*), large colonies of the Sooty Tern (*Sterna fuscata*), as well as the White Tern (*Gygis alba*), Brown Booby (*Sula leucogaster*), and Great Frigatebird (*Fregata minor*). Other breeding seabirds include the White-tailed Tropicbird (*Phaethon lepturus*), Red-tailed Tropicbird (*Phaethon rubricauda*), and Masked Booby (*Sula dactylatra*).

The rocky shoreline and extensive mudflats are important wintering areas for migratory shorebirds, including the Pacific Golden Plover (*Pluvialis fulva*), Ruddy Turnstone (*Arenaria interpres*), and Wandering Tattler (*Heteroscelus incanus*). The Bristle-thighed Curlew (*Numenius tahitiensis*), a species of management concern, is found in relatively high numbers on Palmyra Atoll. Biologists counted 227 Bristle-thighed Curlews on Palmyra Atoll in 1992, a significant number in light of a recent world population estimate of only 7,000 individuals. Oceanic islands in the Pacific serve as vital wintering locations for adults and as year-round residences for juveniles younger than 3 years of age. The wintering birds undergo a flightless period during molt that makes predator-free sites essential to them. Four of the curlews sighted in 1992 had color bands that had been placed on them at their Alaskan breeding sites.

Nesting by the threatened green sea turtle (*Chelonia mydas*) has been observed on Cooper Island. The endangered hawksbill sea turtle (*Eretmochelys imbricata*) is regularly sighted in the waters of the atoll. The pilot whale (*Globicephala macrorhynchus*) and bottle-nosed dolphin (*Tursiops truncatus*) have been reported in the lagoon. The endangered Hawaiian monk seal (*Monachus schauinslandi*) has been sighted on two separate occasions within the atoll.

A 1990 oceanographic survey of the north Equatorial Countercurrent by the National Marine Fisheries Service found the current and the lagoons of Palmyra Atoll to be rich in fishes and their larvae. The lagoon waters and reefs of the atoll support large numbers of fish including mullet, milkfish, blacktip reef sharks, bonefish, and other species. The ocean near Palmyra Atoll is reported by the State of Hawaii as having abundant tuna resources.

Palmyra Atoll has a number of terrestrial crabs including hermit crabs (*Coenobita brevimanus* and *C. perlata*), a native land crab (*Cardisoma carnifex*), and the coconut crab (*Birgus latro*). Many of these species, particularly the coconut crab, are imperiled in other parts of the Pacific

¹ On a worldwide basis, the Red-footed Booby colony at Palmyra Island is second in size only to the colony in the Galapagos Islands in the eastern Pacific.

due to overexploitation by humans. Important marine molluscs include the giant clam (*Tridacna maxima*), a species protected by CITES, and pearl oysters of the family Pteriidae.

Kingman Reef. Kingman Reef is reported to support a largely unexploited marine natural community including coral reef species and open water pelagic fish species. There is likely an island effect at Kingman Reef that enhances the value of the surrounding waters to foraging pelagic seabirds.

Relationship of Project to the Pacific Islands Ecosystem's Management Goals and Objectives: Of all Pacific islands under U.S. control in the Pacific, Palmyra Atoll is unique in terms of latitude and vegetation. Its high rainfall and complex vegetation structure make it very different from all of the other seabird colonies already receiving protection in the Pacific Islands Ecoregion. Protection and management of Palmyra Atoll and Kingman Reef would contribute significantly to the conservation of migratory birds in the Pacific, as well as to the recovery of endangered and threatened sea turtles, and population maintenance of the endangered Hawaiian monk seal. Protection of Palmyra Atoll and Kingman Reef is specifically identified in the draft *Plan for the Pacific Islands Ecoregion* (Ecoregion Plan) under Objective 8: "By the year 2014, secure lasting protection for the most intact areas of native habitat remaining in the Hawaiian and Pacific Islands, preventing their fragmentation and enhancing the functioning of their ecosystem."

Related Resources: The avian species of the Line Islands in the Republic of Kiribati are protected by Kiribati law, but many seabirds are eaten by island residents. Kiribati is considered a poor nation and the government has very little funds for wildlife management, protection, or enforcement even though Malden, Starbuck, Vostok, and parts of Christmas (Kiritimati) are designated as wildlife sanctuaries. Poaching and introduced mammalian predators (rats, cats, dogs) have extirpated ground nesting bird populations in most of the Line Islands. There is no information readily available on the status of sea turtles or fish resources management in Kiribati.

Howland, Baker, and Jarvis National Wildlife Refuges are located near Palmyra Atoll and Kingman Reef in the Pacific equatorial region. These small equatorial Refuges are semi-arid and do not feature the extensive lagoon sand-and-mudflats or *Pisonia grandis* forest habitats found on Palmyra Atoll. Establishment of a staffed refuge at Palmyra could assist with logistic support for management of other equatorial remote islands.

Palmyra Atoll and Kingman Reef are surrounded by the 200-nautical mile U.S. Fishery Conservation Zone (FCZ), within which fishery resources are managed and regulated by the Western Pacific Regional Fisheries Management Council.

No archaeological remains or historic sites have been found on Palmyra Atoll, although evidence of early Polynesian settlements can be inferred from coconut groves on the island.

Pre-existing Wildlife-dependent Recreational Uses:

Palmyra Atoll. The current owners and their lessee allow yachters to visit Palmyra Atoll only with permission. Visitors to the atoll engage in wildlife viewing and some sport-fishing for reef fishes, pelagic fishes, and reef invertebrates. The owners forbid the taking of coconut crabs.

Kingman Reef. Explorers wishing to visit Kingman Reef must secure permission from the Fullard-Leo family and the U.S. Coast Guard. Recreational uses that rarely occur may include sport fishing, diving, and wildlife observation.

Threats:

Palmyra Atoll. Palmyra Atoll's isolation and small size make resident wildlife particularly vulnerable to loss of habitat or degradation of habitat quality. Seabirds are sensitive to human disturbance which can disrupt nesting. Large nesting colonies of Sooty Tern are vulnerable to habitat loss when grass areas are converted to runways or roads. Other threats to the wildlife resources of Palmyra Atoll include predation by nonnative mammals (e.g., black rats, domestic dogs, pigs, and cats); displacement of native plants through the spread of invasive nonnative species; oil spills; and terrestrial and marine debris. Palmyra Atoll has been considered for a number of large development projects including a fish processing plant; nuclear waste storage facility; marine mineral processing station; and various resort proposals. Poaching occurs periodically on this remote, isolated atoll.

Kingman Reef. The primary threats to the natural resources at Kingman Reef are oil spills, shipwrecks, and poaching.

Water Availability and Water Rights: There are no water resources or water rights issues associated with the proposed acquisition at Palmyra Atoll and Kingman Reef.

Justification and Funding: Trust resources present at Palmyra Atoll and Kingman Reef fall under the authorities of the Migratory Bird Treaty Act, Endangered Species Act, and Marine Mammal Protection Act. The protection and management of natural resources at Palmyra Atoll and Kingman Reef would contribute to the protection and recovery of endangered and threatened species. It would also contribute to the protection of significant native biodiversity including world-class migratory seabird colonies and outstanding marine resources; and could provide opportunities for compatible ecotourism. The wet *Pisonia* equatorial forest ecosystem found on Palmyra Atoll is not represented in the National Wildlife Refuge System and is considered to be an imperiled ecosystem globally. Funding for acquisition would be sought from the Land and Water Conservation Fund.

Ownership and Type of Acquisition:

Palmyra Atoll. Palmyra Atoll is currently owned by the Fullard-Leo family of Honolulu, Hawaii except for two parcels on Home Island that are owned by the Cooper family. The atoll is under the administrative jurisdiction of the Department of the Interior. The Service is proposing to study fee title acquisition of Palmyra Atoll from the center of the atoll to the 3-nautical mile limit. There may be an opportunity for the Service to enter into a cooperative partnership with a private partner to provide refuge unit logistic support and opportunities for compatible ecotourism.

Kingman Reef. Kingman Reef was annexed on behalf of the United States in 1922, by the Palmyra Copra Company (Fullard-Leo family), and the family claims ownership. It is an unincorporated U.S. possession administered by the U.S. Department of the Navy. The Service is proposing to study fee title acquisition of Kingman Reef from the center of the atoll to the 3-nautical mile limit.

Initial and Annual Costs: There are no comparable sales of a private Pacific Island on which to base an estimate of the sale price of Palmyra Atoll, although published listing prices have ranged from \$30 million in 1988 to \$36 million in 1996. The Nature Conservancy is considering funding an appraisal immediately, and it is believed that the results may show a significantly lower value (\$15 million) than earlier value estimates. The landowners are reportedly willing to sell their lands to prevent heirs from acquiring a large inheritance tax debt. This willingness to sell, coupled with a desire to perpetuate the natural values of the atoll, could result in a more favorable price for the Service. Partnerships with national or international conservation agencies, like The Nature Conservancy, could help with the funds for acquisition. There is a very real possibility that a portion of the property could be purchased by the private sector for conservation and wildlife recreation purposes, thus significantly reducing the costs to the Federal government.

Similarly, the price for fee title to Kingman Reef is unknown. Due to the negligible commercial real estate value, it might be possible to include it in the purchase price negotiated for Palmyra.

Start up costs for Palmyra Atoll would total \$75,000 and include \$30,000 for a detailed environmental survey, \$25,000 for refuge management planning, and \$20,000 for a field camp facility development. These costs could be offset through partnership programs to conduct surveys, initiate management activities, and to develop the facilities.

Annual costs for operating remote island refuges are higher than those of most refuges in the National Wildlife Refuge System, due primarily to the cost of transporting personnel and equipment to and from remote stations, remote duty station pay adjustments, and the need for more frequent equipment maintenance or replacement due to the highly corrosive marine environments. Should a Refuge headquarters be established on the atoll, annual refuge operations and maintenance costs are estimated at \$500,000 and include boats, equipment,

salaries, and transportation. At this level of management, there would be a Refuge Manager, an Assistant Refuge Manager, a Biologist, and Maintenance Worker on staff.

Start up costs for the management of Kingman Reef would be nominal and are estimated at \$30,000. This would include the cost of a natural resources survey and management plan. Annual operating and maintenance costs (estimated to be \$20,000) would also be nominal since the Service would likely maintain the atoll in a custodial status with periodic resource monitoring and law enforcement expeditions.

In the case of some private-sector ownership at Palmyra, it may be possible for the Service to use living quarters and office space on private property, under a cooperative agreement. Service employees would provide interpretive tours for visitors and assist the private sector with any wildlife-related issues associated with ecotourism or wildlife-dependent recreation. This arrangement, modeled after the public/private partnership at Midway Atoll National Wildlife Refuge, may further reduce operational costs to the Service.

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The conservation community is expected to support the establishment of refuge units at Palmyra Atoll and Kingman Reef. The Nature Conservancy fully supports the Service's proposal to protect Palmyra Atoll. Strong negative reactions from the public and congressional delegation to a nuclear waste storage proposal in 1996 might indicate that there would be a favorable response to the establishment of a refuge unit at Palmyra Atoll. Support from other organizations concerned with conservation of Pacific wildlife resources is expected.

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	Franklin's Gull	<i>Larus pipixcan</i>	Migratory	Accidental
	Sooty Tern	<i>Sterna fuscata</i>	Migratory	Breeding
	Great Crested Tern	<i>Sterna bergii</i>	none	Visitor
	Brown Noddy	<i>Anous stolidus</i>	Migratory	Breeding
	Black Noddy	<i>Anous minutus</i>	Migratory	Breeding
	White Tern	<i>Gygis alba</i>	Migratory	Breeding
	Mallard	<i>Anas platyrhynchos</i>	Migratory	Visitor
	Northern Pintail	<i>Anas acuta</i>	Migratory	Visitor
	Green-winged Teal	<i>Anas crecca carolinensis</i>	Migratory	Visitor

	Common name:	Scientific name:	Federal status:	Occurrence at Palmyra:
	Eurasian Widgeon	<i>Anas penelope</i>	Migratory	Visitor
	American Widgeon	<i>Anas americana</i>	Migratory	Visitor
	Northern Shoveler	<i>Anas clypeata</i>	Migratory	Visitor
	Cattle Egret	<i>Bubulcus ibis</i>	Migratory	Visitor

MARINE REPTILES:

	Green sea turtle	<i>Chelonia mydas</i>	Threatened	Breeding
	Hawksbill turtle	<i>Eretmochelys imbricata</i>	Endangered	Resident

MARINE MAMMALS:

	Pilot whale	<i>Globicephala macrorhynchus</i>	-	Native
	Hawaiian monk seal	<i>Monachus schauinslandi</i>	Endangered	Native
	Bottle-nosed dolphin	<i>Tursiops truncatus</i>	-	Native

TERRESTRIAL ARTHROPODS:

	Coconut crab	<i>Birgus latro</i>	-	Native
	Land crab	<i>Cardisoma carnifex</i>	-	Native
	Land hermit crab	<i>Coenobita brevimanus</i>	-	Native
	Land hermit crab	<i>Coenobita perlatus</i>	-	Native

MARINE INVERTEBRATES:

	Giant clam	<i>Tridacna maxima</i>	CITES	Native
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INTRODUCED VERTEBRATES:

	Marine Toad	<i>Bufo marinus</i>	-	Introduced
	Domestic chicken	<i>Gallus gallus</i>	-	Introduced
	Domestic cat	<i>Felis catus</i>	-	Introduced
	Dog	<i>Canis familiaris</i>	-	Introduced
	Domestic pig	<i>Sus scrofa</i>	-	Introduced
	Black rat	<i>Rattus rattus</i>	-	Introduced

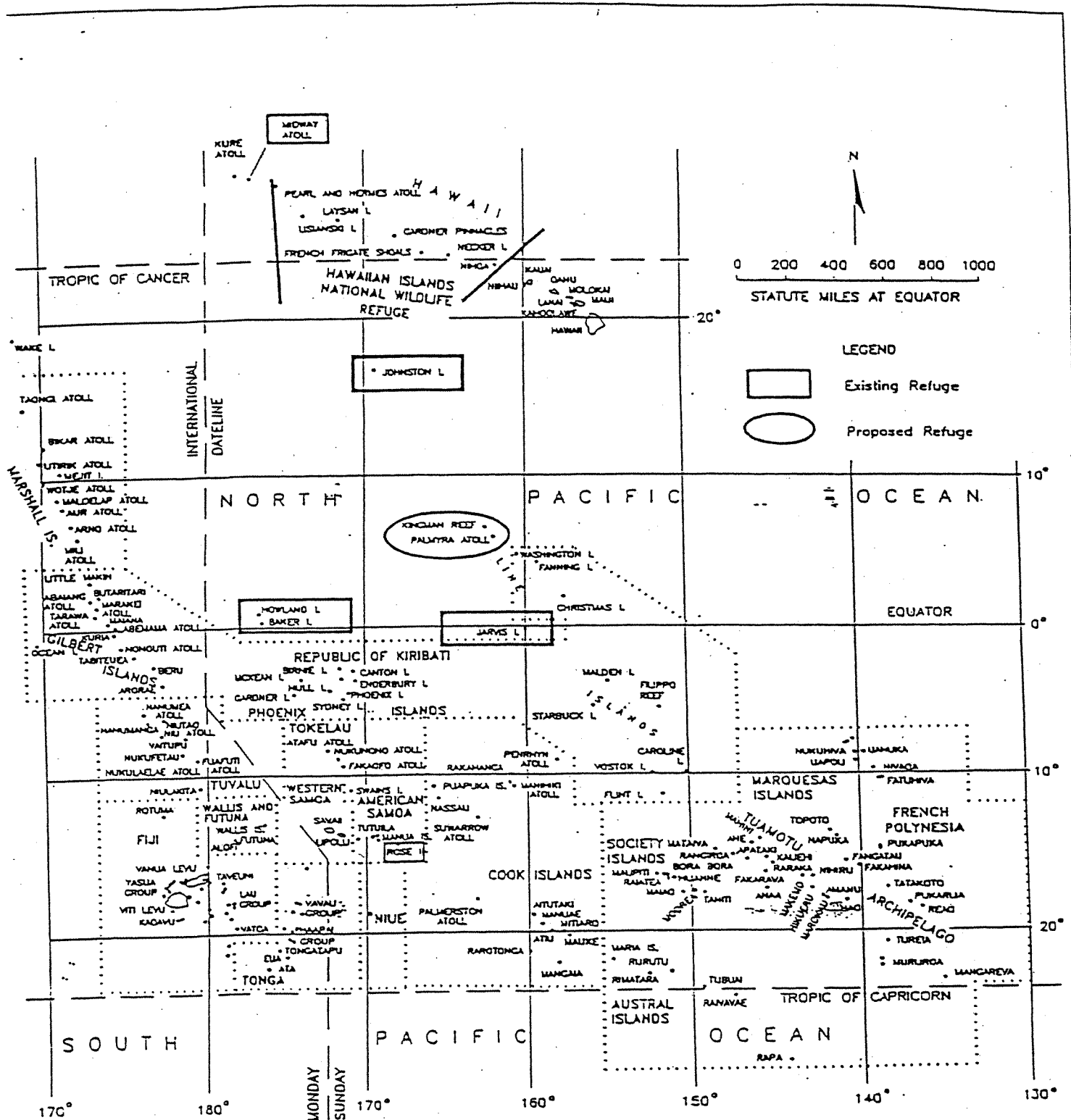


Figure 1. Proposed Line Islands Units, Palmyra Atoll and Kingman Reef

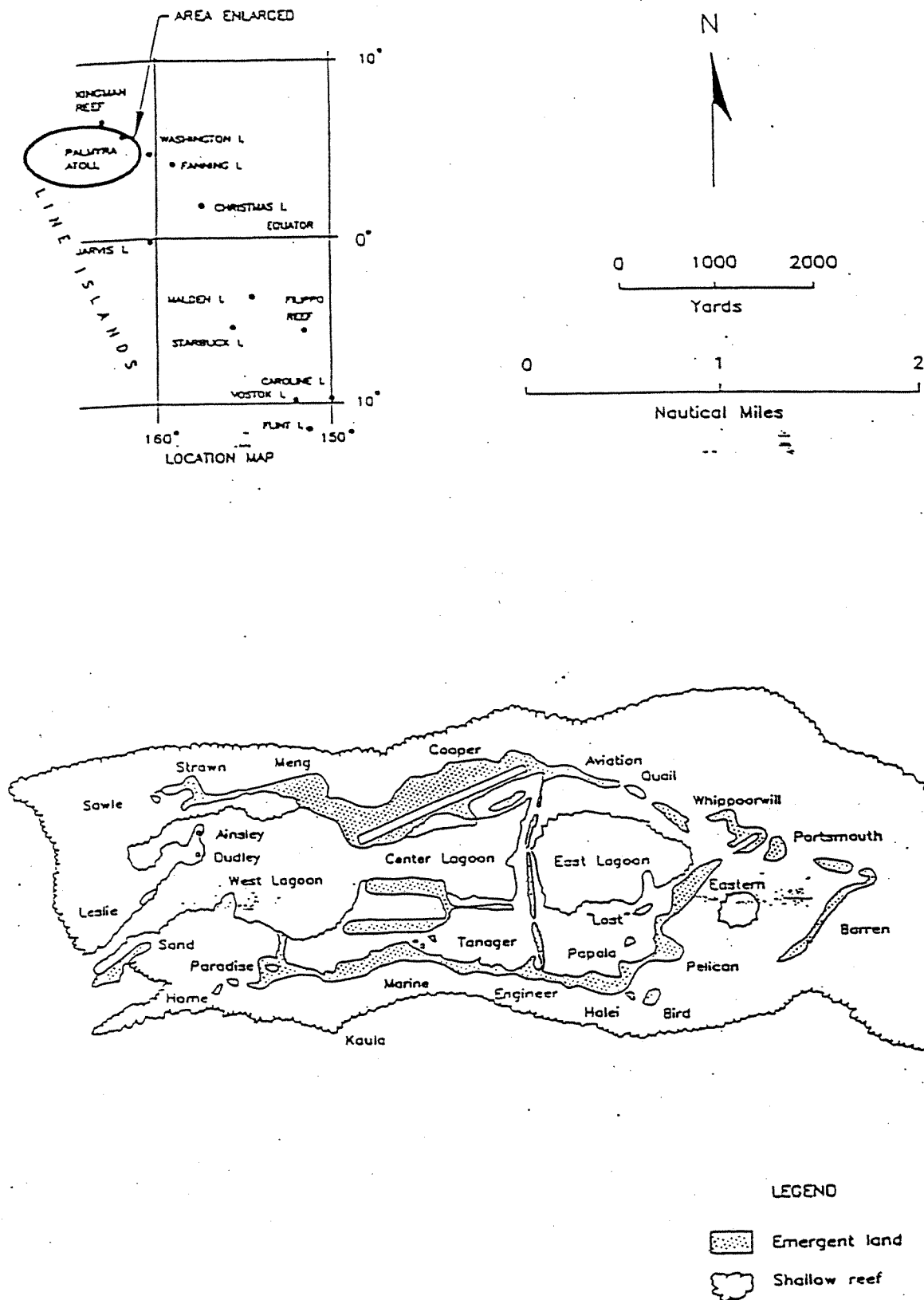


Figure 2. Palmyra Atoll.

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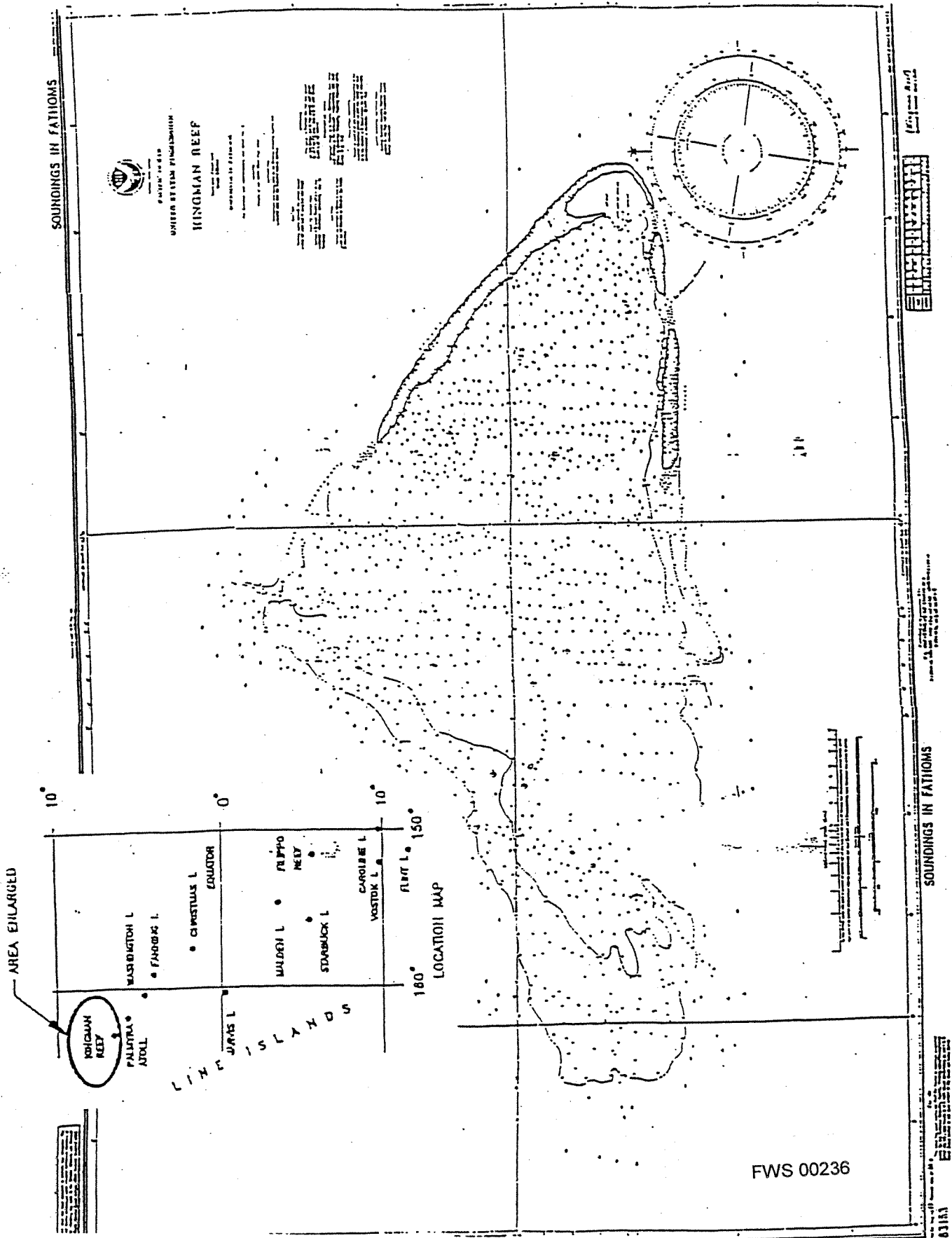


Figure 3. Chart of Kingman Reef, Line Islands.



United States Department of the Interior

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Lt. Colonel Ralph H. Graves
Honolulu District Engineer
U.S. Army Corps of Engineers
Building 230
Fort Shafter, HI 96858-5440

6 OCT 1997
HED <i>Left</i>
DMR <i>g Ball</i>
SECRET
ET- E

Either before or after his trip is OK with me.

OCT 3 1997

Rec'd 1/6/98

Dear Col. Graves:

I am writing you in the interest of good coordination regarding a project in which we share a mutual interest – the cleanup of Palmyra Atoll. Enclosed please find a memorandum from the Director of the Fish and Wildlife Service (Service), Jamie Clark, which gives her approval for the Service to begin detailed planning toward (hopefully) acquisition of Palmyra Atoll and Kingman Reef as units of the National Wildlife Refuge System. Our efforts to date have been coordinated closely with Mr. Peter Savio, a local realtor who represents the interests of the majority owners. We are also working with Mr. Chuck Cook of The Nature Conservancy (TNC), and at this point foresee TNC actually tendering an offer for the property. If that is successful, the Service will repay TNC in the future with dollars appropriated by Congress through the Land and Water Conservation Fund.

Please note that the third paragraph of Director Clark's memorandum focuses on the contaminant issues at Palmyra. The Service is eager to be of assistance to the Corps in any way needed to carry out the cleanup in an expeditious and environmentally sensitive manner. We just completed an enormous cleanup effort at Midway, where the Navy spent over \$80 million in a three year effort. Working together with the Navy and its contractors, the Service used good conservation practices to minimize losses to seabirds, and cooperated with innovative techniques that made the cleanup go more smoothly and efficiently. One practice that really helped for a better project at Midway was using petroleum-soaked soil to make asphalt, rather than disposing of the soil in the landfill. On the natural resource side of the equation, black shade cloth was anchored to the ground where future projects were planned, so that birds were discouraged from nesting in the project area. There were a number of other special practices utilized for the Midway cleanup, and the Service would very much like to share some of our Midway experiences with you because we believe the cleanup efforts at Palmyra will benefit from our experiences at Midway.

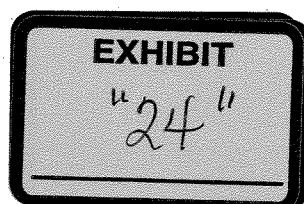
I will be traveling to Palmyra on October 14, and will return on October 28. Perhaps we can discuss your cleanup plans either prior to or after my trip. Again, the Service is interested in full cooperation, including but not limited to the issuance of any Migratory Bird Treaty Act permits necessary to facilitate the cleanup.

Thank you for your efforts on behalf of a clean environment at Palmyra. I hope to hear from you or your staff soon.

Sincerely,

Robert P. Smith
Robert P. Smith
Pacific Islands Manager

Enclosure



FWS 00237